



Out of school hours – what promotes student wellbeing?

Insights from the Youth Activity Participation Study of Western Australia

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Adolescent Pathways

- Adolescence is a developmental period characterised by preparation for adulthood.
- Significant changes in physiology, cognition, and social context, affording much potential for novel behaviour and shifting pathways
- This relative plasticity has important implications – we can search for characteristics of young people and the aspects of their ecologies that best promote positive development (Lerner, 2003)



Environment in developmental perspective (Bronfenbrenner, 1999)

- We must distinguish context (e.g., social class of community) from process (relationship between the environment and the developing person)
- Proximal processes – interactions in immediate environment
 - For development to occur, the engagement in the activity must take place fairly regularly, over an extended period of time, and should become increasingly complex



Contexts that meet adolescent developmental needs

- Characterised by several key processes (Connell, Deci & Ryan – SDT)
 - Competence – Mastery, Challenge
 - Relatedness – Belonging, Attachment, Support
 - Autonomy – Personal Control and Ownership
- Other needs (Eccles and Gootman, 2002)
 - Mattering – Making a meaningful difference
 - Responsibility – Being a contributing member of one's social group
 - Identity – Knowing one's place in one's social context
 - Engagement – Challenge and focus (Larson, 2000)



Organised activities, which may meet these needs, are popular with adolescents

- Most Australian youth participate in at least one extracurricular activity
 - Sports are most common (62%)
 - Followed by arts, such as dance and drama (29%)
 - Girls participate in more types, boys most likely to play sports



Guiding Questions

- ✓ WHAT is the impact of different types of leisure time use?
- ✓ WHY are organised activities related to positive outcomes?
 - Peer group characteristics
 - Developmental experiences (quality)
 - Positive adult leaders
- ✓ For WHOM?
 - Disadvantaged youth
 - Relatively early maturing adolescents



WHAT: Measuring Activity Participation

- First (and until quite recently), there was “yes/no”
 - Yes is generally better than No
- Then, there was dosage
 - *Frequency, intensity, duration*
 - More is generally better...



Benefits of Activity Participation

- Good evidence for links to positive development in adolescence:
 - Lower risk behaviours, better grades, self-concept, efficacy, adjustment, school attachment, academic achievement and aspirations
 - (e.g., Blomfield & Barber, 2011; Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006; Crosnoe, 2001; Dotterer, McHale, & Crouter, 2007; Eccles & Barber, 1999; Holland & Andre, 1987; Mahoney & Cairns, 1997; Marsh & Kleitman, 2002; Youniss & Yates, 1997)



Long-term Benefits of Participation

- Higher *adult* educational and occupational attainment, income, better psychological adjustment, and involvement in voluntary organizations and political activities
 - (e.g., Barber, Eccles, & Stone, 2001; Holland & Andre, 1987; Otto, 1975, 1976; Otto & Featherman, 1975)

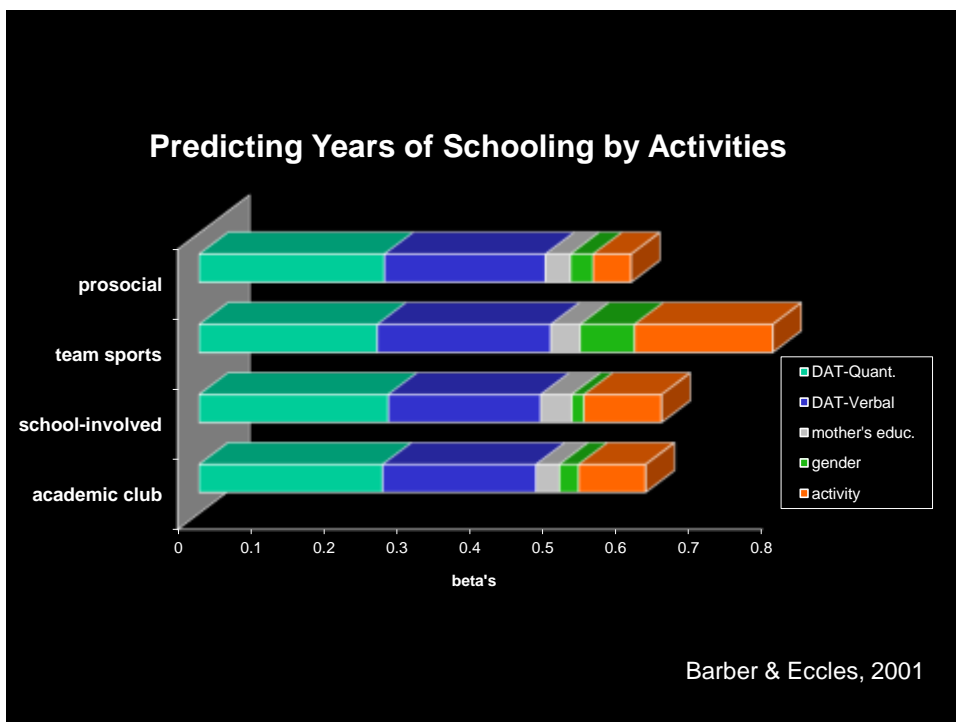


WHAT: Measuring Activity Participation

- First (and until quite recently), there was “yes/no”
 - Yes is generally better than No
- Then, there was dosage
 - *Frequency, intensity, duration*
 - More is generally better...
- Sometimes, we measure content
 - *Type* (sport, art, service)
 - Some are better than others

Which specific activities are facilitative of positive development?

- Several researchers have documented that educational and occupational benefits seem to be greater for sports
 - (e.g., Barber, Eccles, & Stone, 2001; Marsh, 1993; Marsh & Kleitman, 2002; 2003)
 - Example from US 20-year study...



Do Australian youth benefit from activity participation?

- Sport is a different experience in Australia, compared to US high school sport cultures.
 - Much community-based participation
 - Fewer interschool rivalries, and thus perhaps lower school team identity (no cheerleaders)
 - Perhaps less exclusion of non-elite athletes?
 - Not a track to university scholarship; no minimum GPA to play



Youth Activity Participation Study – Western Australia (YAPS-WA)

- Participants
 - 1800 Year 8 and 10 students
 - Surveyed annually
 - (2007-2012)
 - 900 year 8 students added as third cohort (2010-2012)
 - From 33 high schools
 - Balanced between government and independent
 - Perth Metro and WA regional schools
 - Regional centres range from 4200 to 35000

Mobile YAPS Lab

- Computer-assisted data collection, 45 minute survey
 - Server,
 - Router,
 - and 25 laptops (now iPads)



Recruitment



- Active parent consent
- Prize lottery



Sample

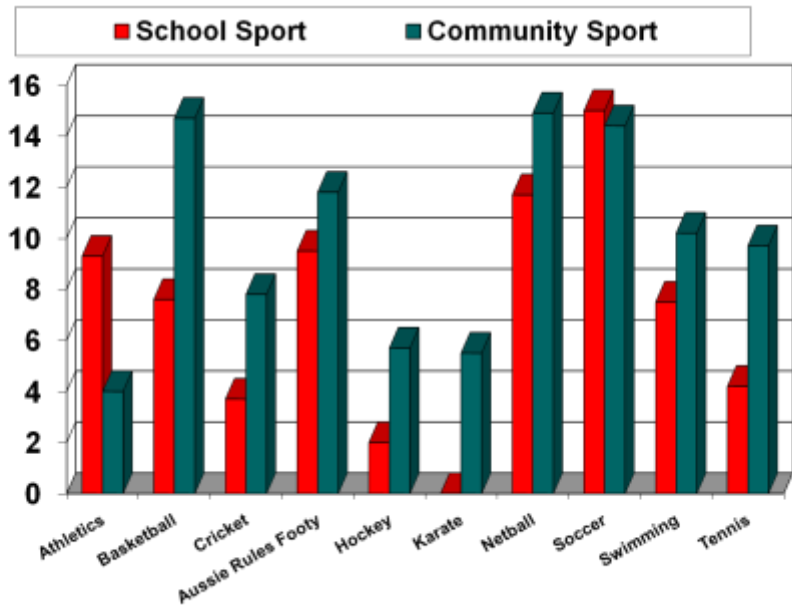
Ethnicity	% of YAPS Sample
Caucasian	78.7%
Aboriginal or Torres Strait Islander	1.7%
Asian	6.9%
Middle Eastern	0.5%
African	1.3%
Other	4.1%
Missing	6.7%

Measures

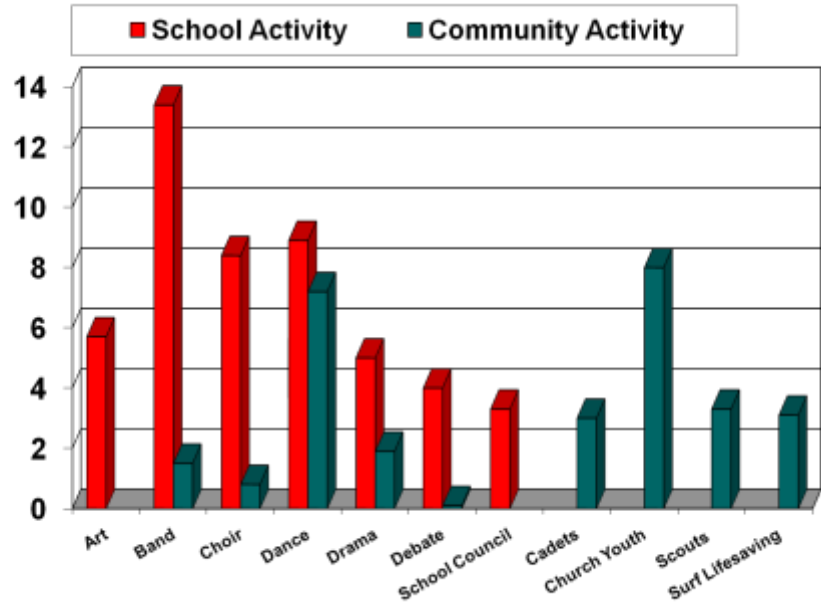
- ***Activity participation data*** were collected using four checklists.
 - School-based sports;
 - community-based sports;
 - school-based activities;
 - and community-based activities.



Percent in School and Community Sports



Percent in School and Community Activities



Some youth participate in both sport and non-sport activities

- Need to consider the *profiles* of participation –the ways that students combine multiple activities, or not
 - For example, while some students play on a sport team or two, and others spend their time in academic clubs, still others combine different types of activities.
 - Feldman and Matjasko (2007) found that multiple activity portfolios were the most common, with 43% of students engaged in more than one type of activity.



- **no activities**
- **only non-sport activities**
- **only sports**
- **sports and activities combined**



School SES

- SES at school level (DET-WA)
 - Index of Community Socio-Educational Advantage is calculated with data from the Australian Bureau of Statistics, based on the addresses of all students attending each school.
 - The index is compiled from the education, occupation, income, ethnicity, and single parent status of each student's household (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2010).
- Good range of SES among YAPS schools (798-1188)
 - Low SES = 12 (521)
 - Mid SES = 10 (539)
 - High SES = 9 (572)



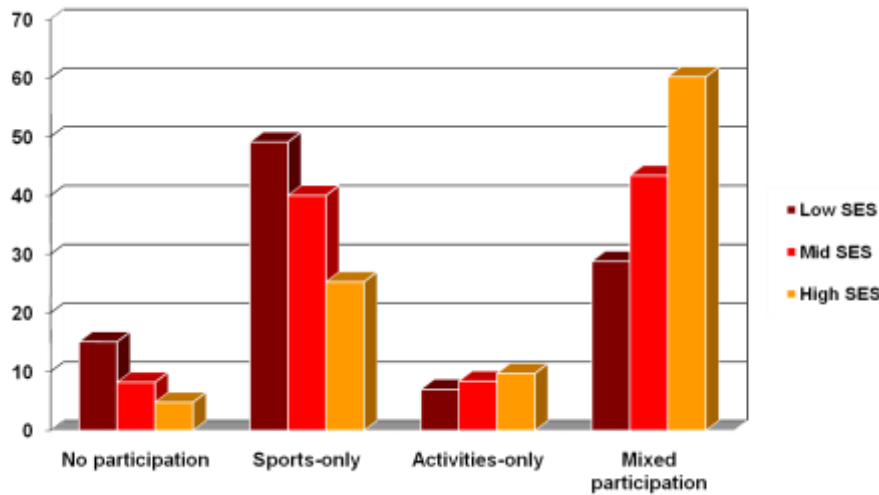
Table 1: Participation of children aged 5 to 14 years in organised sporting and/or cultural activities outside school hours in the last 12 months

Type of community	Involved in cultural activities and sport	Involved in cultural activities only	Involved in sport only	Not involved in cultural activities or sport	Total
	Proportion (%)				
Lowest quintile (Most disadvantaged areas)	12.5	10.2	30.3	46.9	100.0
Second quintile	16.2	12.9	35.4	35.4	100.0
Third quintile	20.9	13.0	39.4	26.7	100.0
Fourth quintile	26.1	12.5	39.9	21.5	100.0
Highest quintile (Most advantaged areas)	36.6	11.4	38.6	13.3	100.0
Total population aged 5–14 years	23.1	12.1	37.1	27.7	100.0

Source: Unpublished data using IRSAD from the ABS (2012) Children's participation in cultural and leisure activities, April 2012



Activity participation by SES



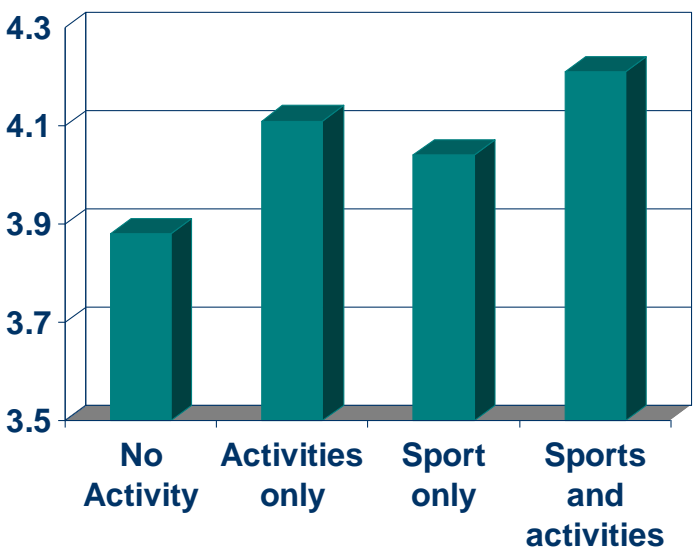
Academic Self Concept



(Blomfield & Barber, 2009)

S&A>N,S; A>N

School Attachment by Portfolio

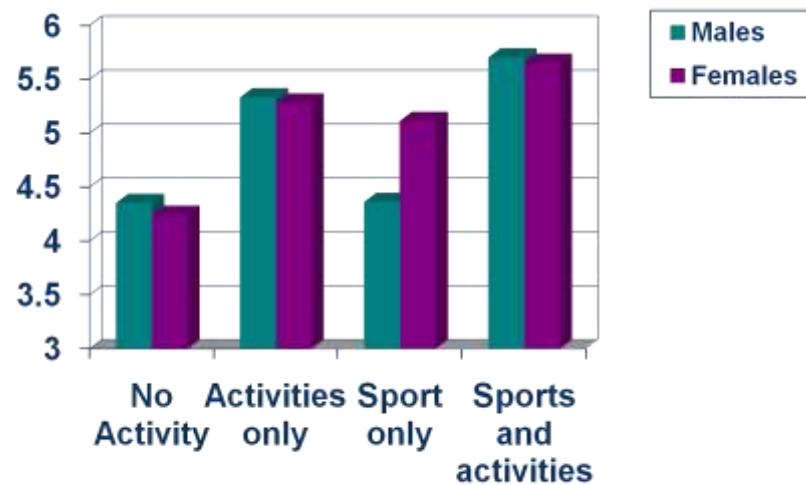


F>M

A;A+S>N
A+S>S

University Plans by Portfolio

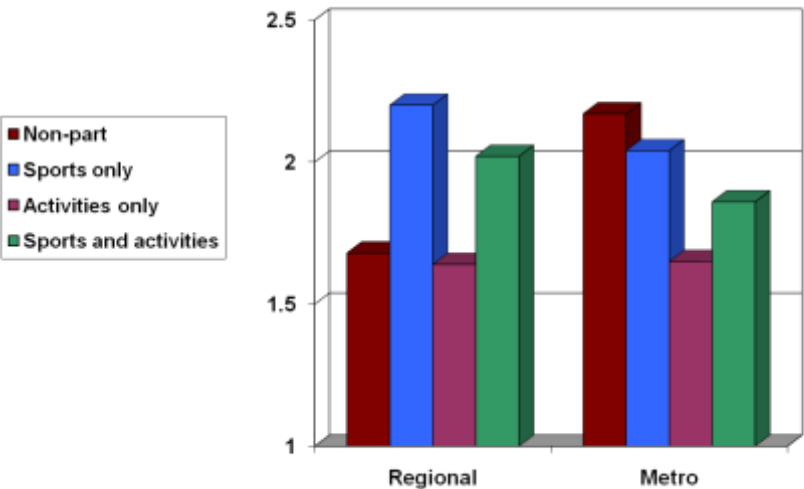
How likely is it that you will go to university after high school?



S+A;A>N;S

*Portfolio x gender

WHERE: Alcohol Use by Profile for Regional and Metro Youth



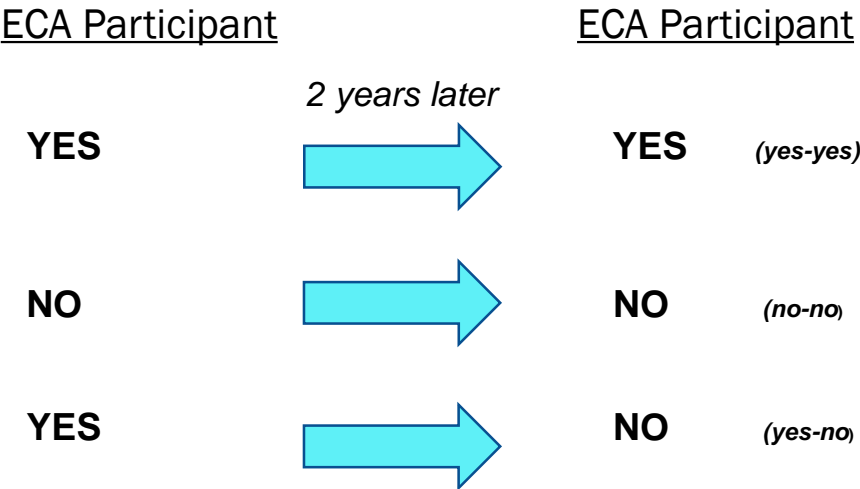
Overall : Regional youth ~ metro youth

Regional Profile: Sport + activ > activities only; **non-part.**

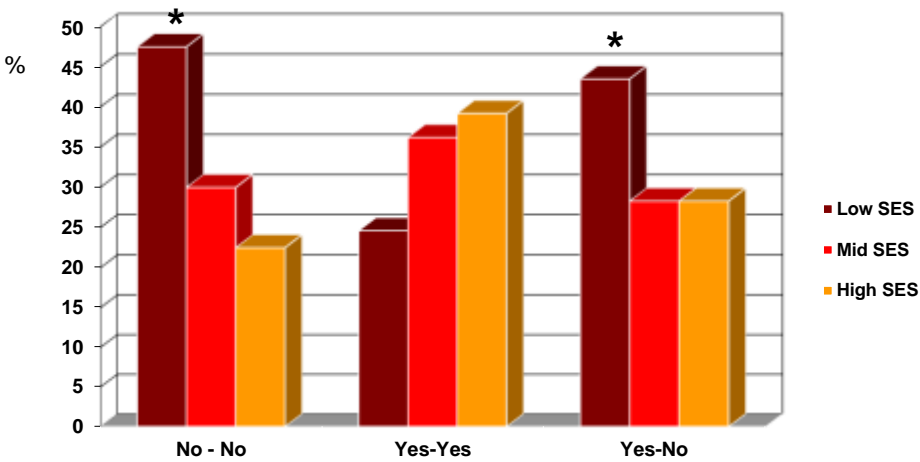
Metro Profile: sport only; non-part > activities only; sport + activ.

Does Dropping Out Matter?
Adolescents' Participation in Extracurricular Activities
Linked to Changes in their Sense of Self

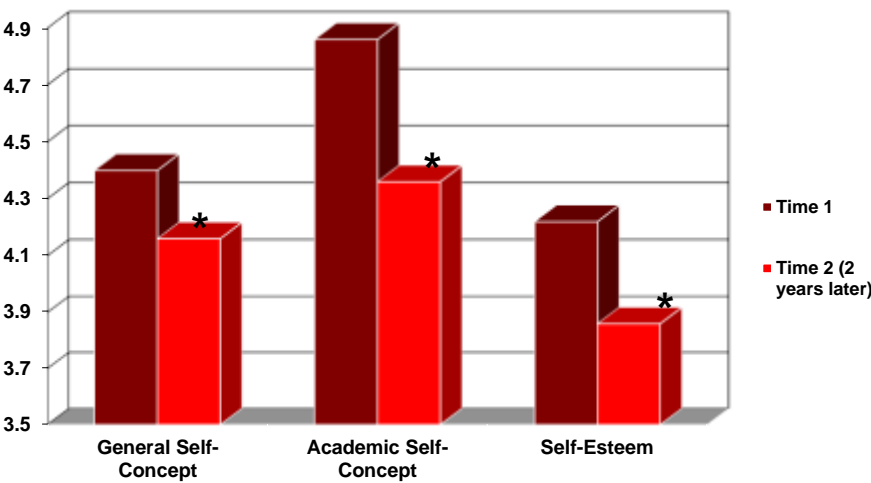
- 1) Do youth from different SES backgrounds drop out of extracurricular activities at different rates?
- 2) Is dropping out of extracurricular activities linked to declines in general and academic self-concept and self-esteem?
- 3) Is dropping out of extracurricular activities particularly detrimental for youth from low SES backgrounds?



Changes in ECA participation by SES



Dropping out of ECA by sense of self

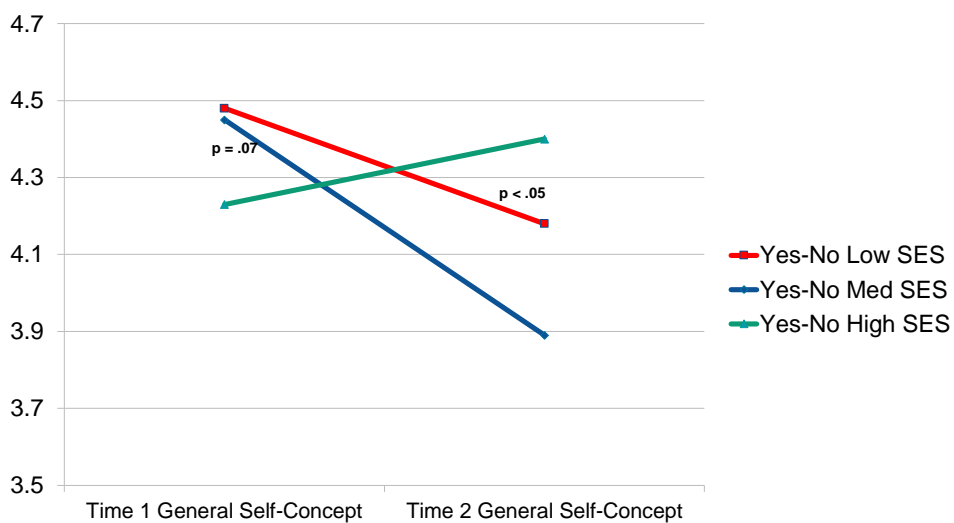


For Whom?



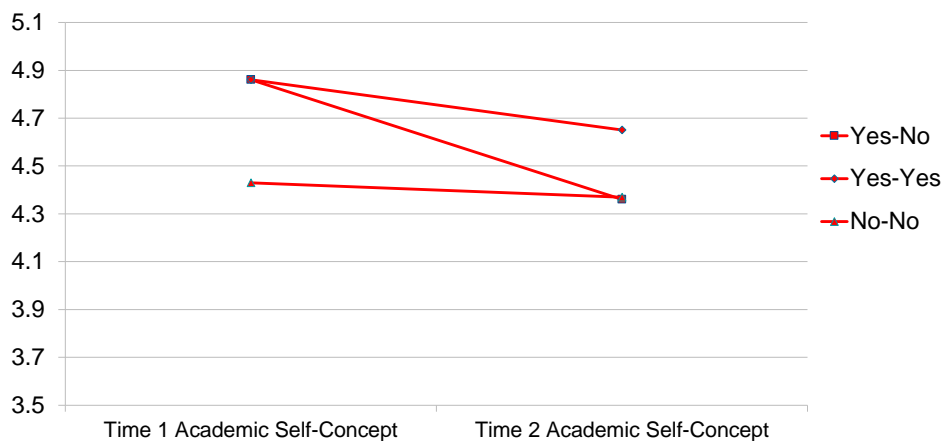
- Is dropping out of extracurricular activities particularly detrimental for youth from low SES backgrounds?
- A 3 (ECA Participation: no-no, yes-yes, yes-no) by 3 (SES: Low, Mid, High) mixed ANOVA nesting the 2-level “time” component within subjects was run for each outcome

General Self-Concept

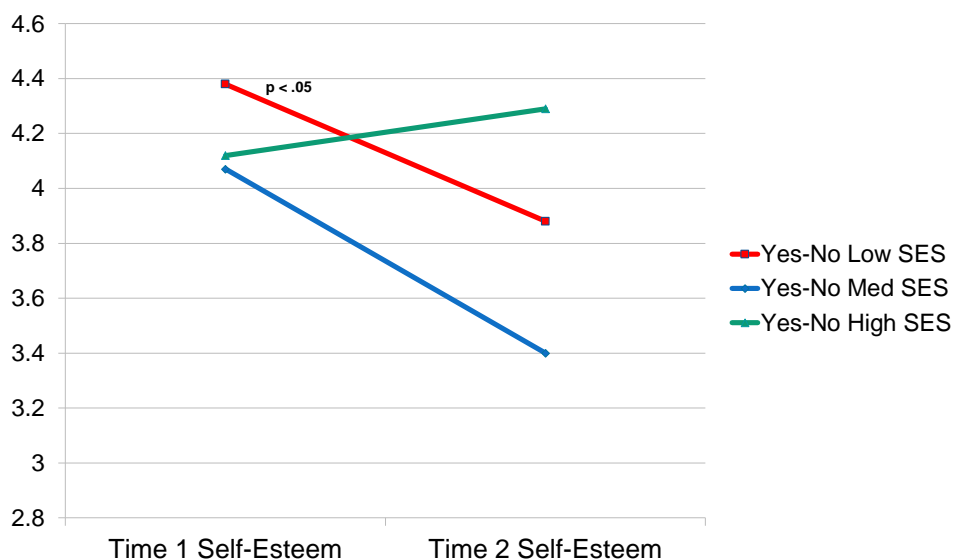


Academic Self-Concept

Dropping out of extracurricular activities is linked to a reduction in Academic Self-Concept but this does not vary for youth from different SES backgrounds.



Self-Esteem





Role of disadvantage?

- Youth from low SES backgrounds are more likely to drop out of extracurricular activities than youth from other SES backgrounds.
- Youth who drop out of extracurricular activities have significant reductions in their:
 - General self-concept
 - Academic self-concept
 - Self-esteem
- For youth from lower SES backgrounds, dropping out of extracurricular activities appears to be particularly detrimental



If so good for them, why do teens stop playing?



We asked those who had dropped out of a sport why they quit...

Time Pressure

participating in
TAFE and school
and balancing
work is hard.
dropping a sport
was a good
option

Starting year 11 with
a more demanding
workload

too much
pressure
from
school



Peer Problems

netball because i
dont like it very
much and it is a
really bitchy sport

basketball because i felt
that i wasn't good enough to
compete with the other
people and i knew they
didn't like me or/and me
being there.

Soccer
because of
sexual
harrasment
and bullying.



Problems with adult leader

because
our coach
quit on us.

basketball, i felt
that the coaches
didn't have enough
time for kids who
don't know how to
play the sport.

I didn't like the
basketball
coach i had



Resource Problems

Soccer because
living in the country
makes it hard to
get to and from
games.

The person
running it stopped
and there was no-
one to take over
his job.

Weren't
enough
available
teachers or
coaches in the
area.

swimming
club shut
down

Couldn't
afford
anymore

Stop and discuss

Can you think of examples of students who have maintained engagement in school or re-engaged because of an activity?

What are successful strategies to find opportunities that match student interests?

How hard is it to develop new non-sport activities?



Why are there benefits?

- #1: Affiliations with positive friends
 - (Barber, Stone, Eccles, & Hunt, 2005; Mahoney, 2000)
- #2: Developmental experiences
 - Challenge, initiative, identity enhancement in a conventional and valued endeavor
- #3: Connection to supportive adults



Why #1? Peer group norms may help to explain differences in outcomes

Knowing what an adolescent is doing may tell us a lot about who she is with.



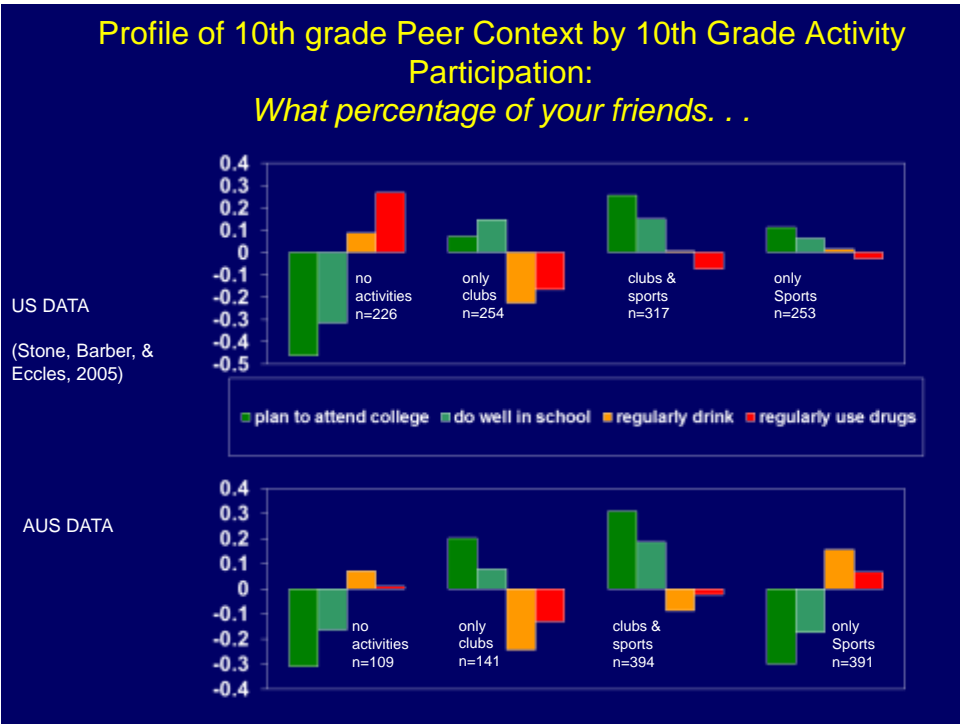
Peer group attributes

- What percentage of your friends in this sport (activity) are each of the following?

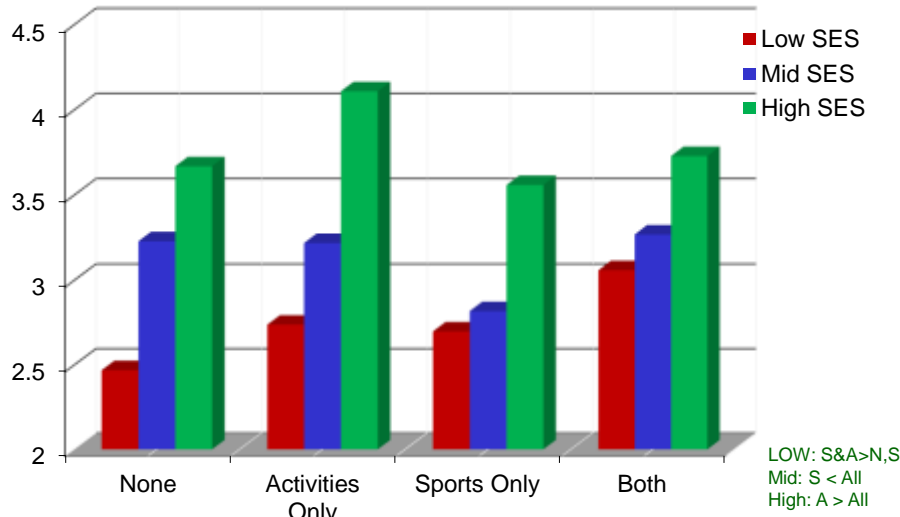
none		half		all
1	2	3	4	5

- Planning to go to university
- Doing very well at school
- Drink alcohol
- Likely to skip class



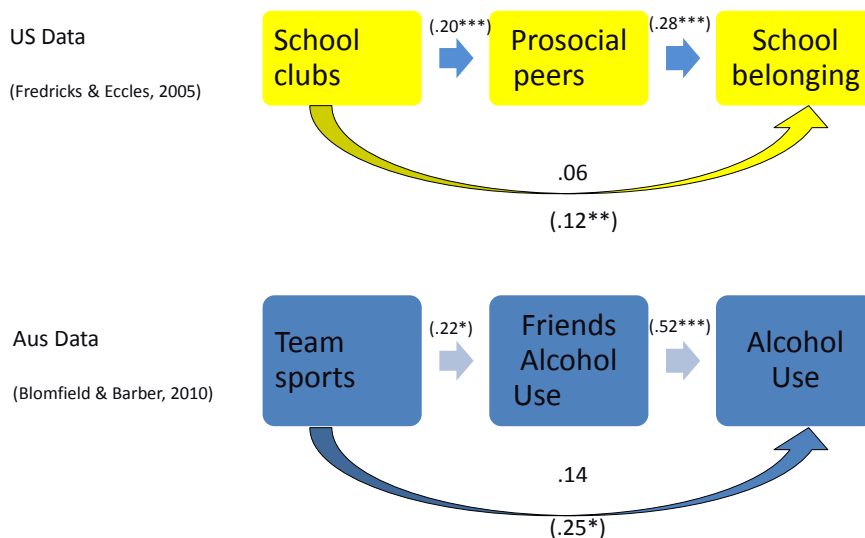


Friends planning to go to university



SES**, Portfolio**, SES x Portfolio **

Peer attributes mediate the activity→well-being link



Stop and discuss

What are the peer cultures in your school sports and activities?

Do you see peer influence at work?

WHY #2: Activities afford opportunities to express and refine identity, and enact other key developmental tasks (competence, connection, engagement)

An activity can demonstrate to yourself (and to others) who you are, what you are good at, and where you fit in



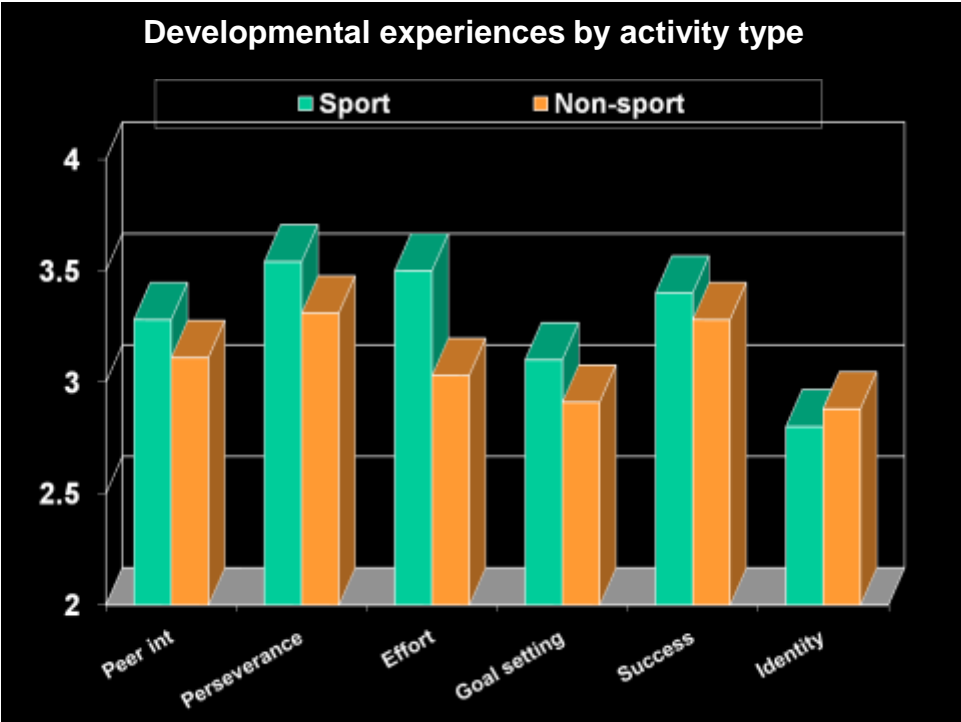
Activities can encourage effort and perseverance, and allow one to experience success

Developmental Experiences

- Based on your involvement in this activity, please rate whether you have had the following experiences by ticking the appropriate box (1: *Not at all*; 2: *A little*; 3: *Quite a bit*; 4: *Yes, definitely*)
 - *Identity exploration and reflection* (6 items)
 - “Tried a new way of acting around people”
 - “This activity got me thinking about who I am”
 - *Experiences of success* (3 items, e.g., “I have been successful in this activity”)
 - *Experiences of goal setting* (3 items, e.g., “I set goals for myself in this activity”)
 - *Experiences of peer interactions* were measured with 4 items, including “worked with other people my own age on a common goal.”
 - *Perseverance* (3 items, When this activity is difficult I keep trying anyway)



Measures of Identity were drawn & adapted from YES 2.0 (Hansen & Larson 2005; Hansen, Larson & Dworkin, 2003)



Experience	Sports vs class	Sports vs Friends	Sports vs Job
Identity	↑	↓	
Initiative	↑	↑	↑
Emotional Regulation	↑		
Team Work and Social Skills	↑		
Positive Relationships	↑	↓	
Adult networks and social capital	↑		

How do sport experiences compare to other key developmental contexts for youth?

School Class vs. Organised Activities

Experience	Sports	Arts	Academic	Community	Service	Faith
Identity	↑	↑	↑	↑	↑	↑
Initiative	↑	↑	↑	↑	↑	↑
Emotional Regulation	↑	↑	↑	↑	↑	↑
Team Work and Social Skills	↑	↑	↑	↑	↑	↑
Positive Relationships	↑	↑	↑	↑	↑	↑
Adult networks and social capital	↑	↑	↑	↑	↑	↑



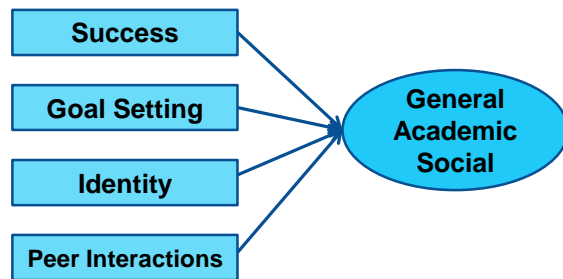
Why do activities predict well-being?

Do the developmental experiences of *success, goal setting, identity exploration & reflection, and peer interactions*, positively predict an adolescent’s general self-worth, and academic self-concept?

Does the quality of these experiences matter?

Yes, developmental experiences in sports and activities positively predict

- General Self-Worth
- Academic self-concept
- Social self-concept



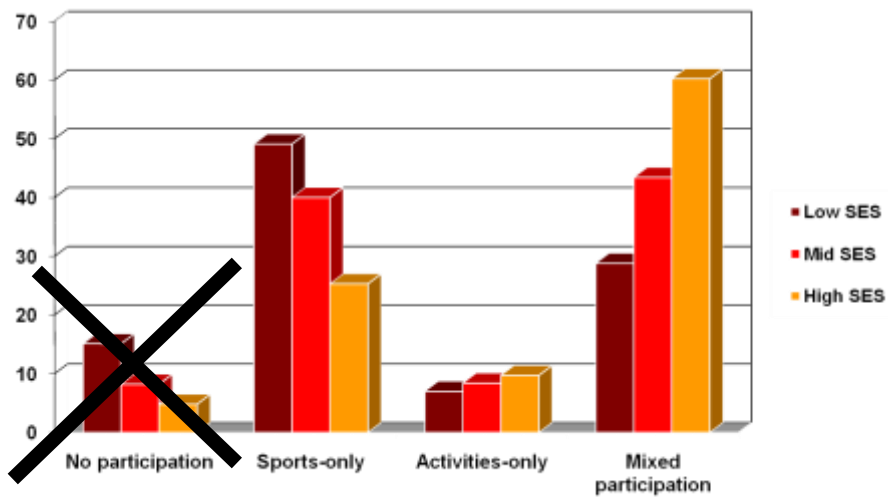
Blomfield and Barber, JYA, 2011

FOR WHOM?

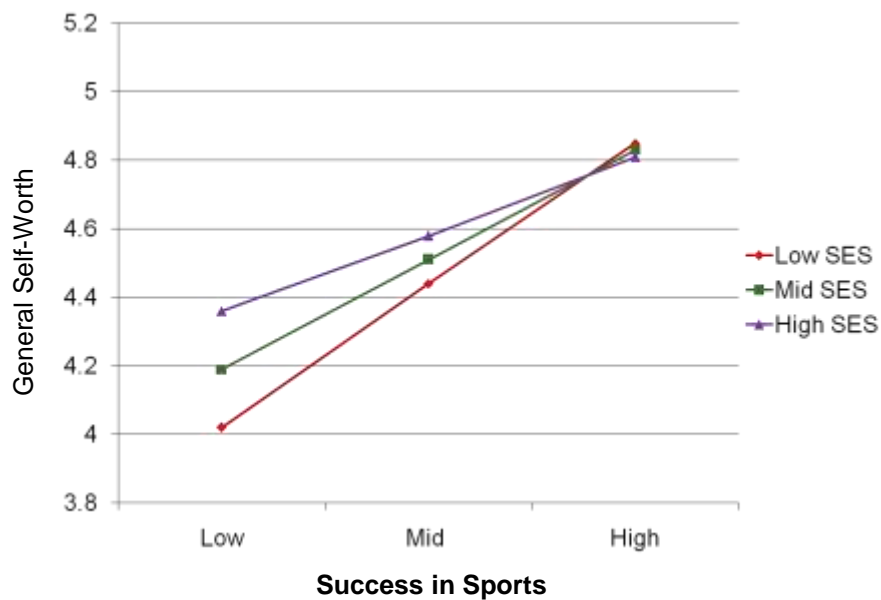
- Are the benefits greater for those with fewer developmental assets or greater vulnerabilities?
 - The moderating effect of socioeconomic status on the outcomes associated with activity participation has received relatively little attention
 - Benefits of extracurricular activity participation are particularly prominent for adolescents from more disadvantaged, or at-risk, backgrounds (Blomfield & Barber, 2011; Hull, Kilbourne, Reece, & Husaini, 2008; Mahoney & Cairns, 1997; Marsh, 1992).
 - Do the explanatory *processes* have more power for low SES youth?

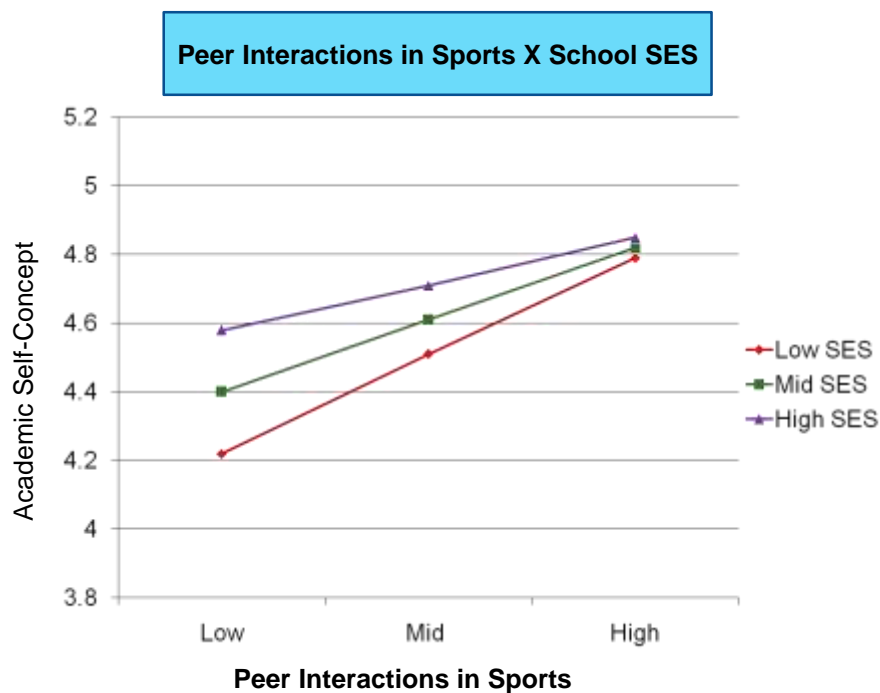


Activity participation by SES



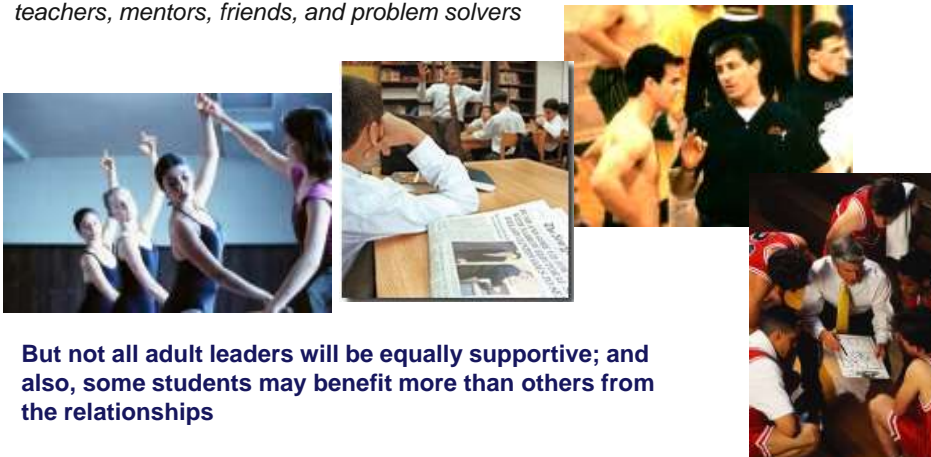
Success in Sports X School SES





WHY #3: Organized activities provide youth with access to caring adults

Coaches and other involved adults invest a great deal of time and attention in these young people- acting as teachers, mentors, friends, and problem solvers



Positive Adult Experiences

The following questions are about the adult leader in your sport/activity

(1: Not at all; 2: A little; 3: Quite a bit; 4: Yes, definitely)

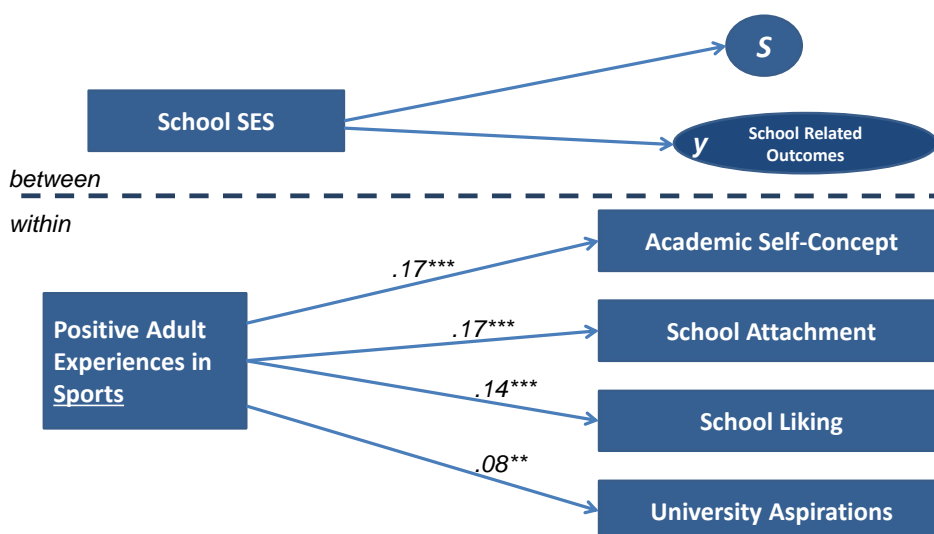
The adult leader in this activity.....

- "Encourages me to try my best"
- "Supports me when I am having difficulties"
- "Is approachable"
- "Makes me feel like I can succeed in this activity"
- "Creates a strong positive environment"

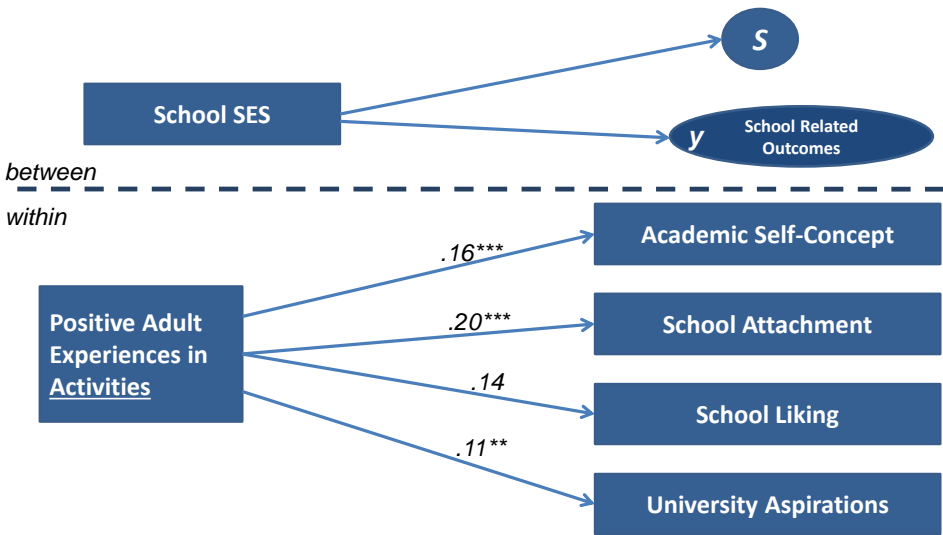
- Sport alpha = .85
- Activity alpha = .91



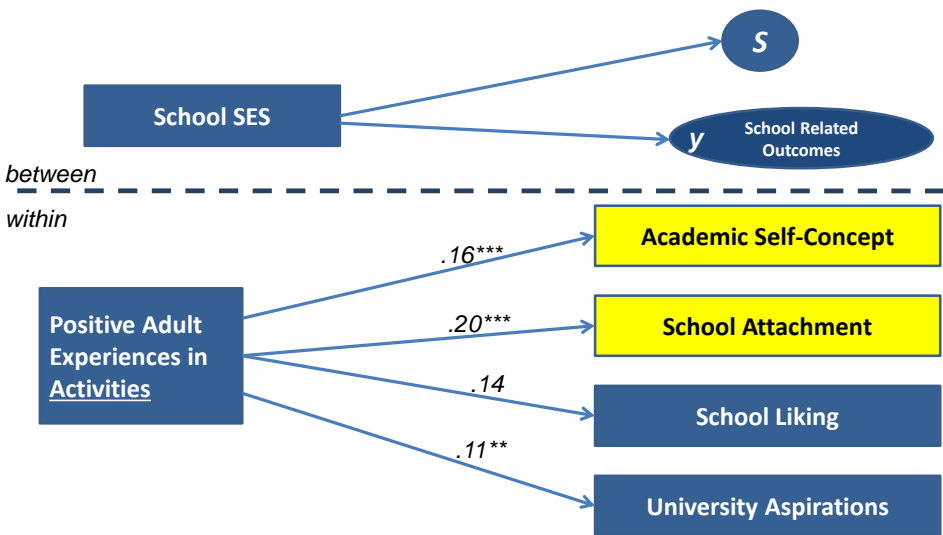
Positive Adult Experiences in Sports



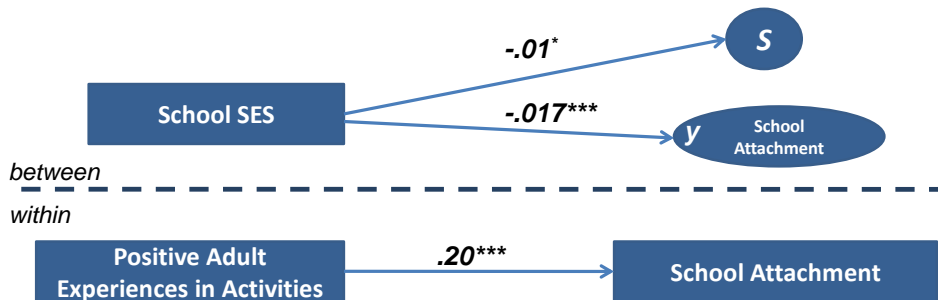
Positive Adult Experiences in Activities



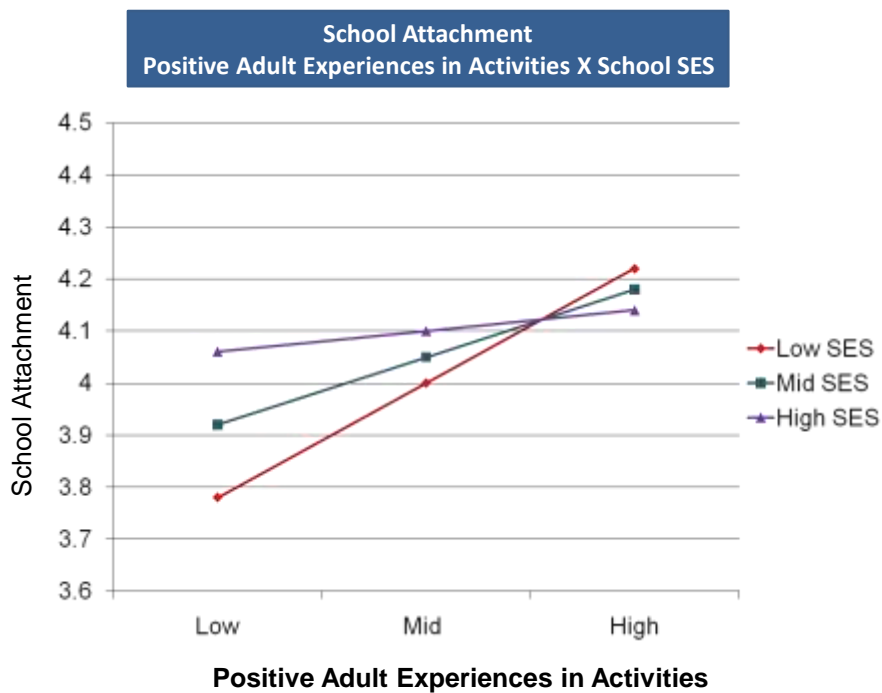
Positive Adult Experiences in Activities



School Attachment: Cross-Level Interaction



- 1) Positive adult experiences in activities is associated with a higher school attachment
- 2) School SES significantly contributes to the variation in adolescent school attachment scores across schools – higher school SES = > school attachment
- 3) As school SES increases the effect of positive adult experiences on school attachment decreases.



FOR WHOM? – Early Maturation

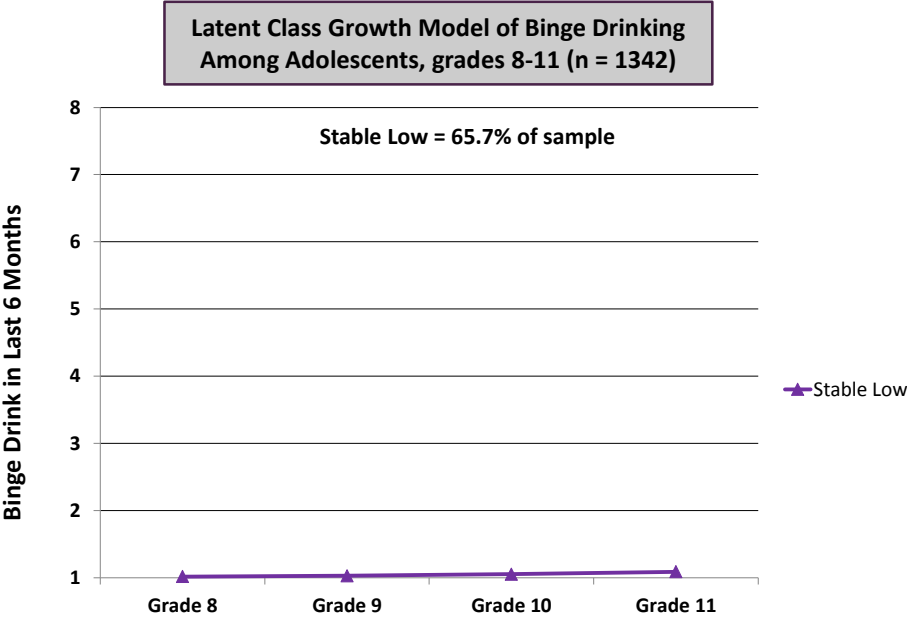
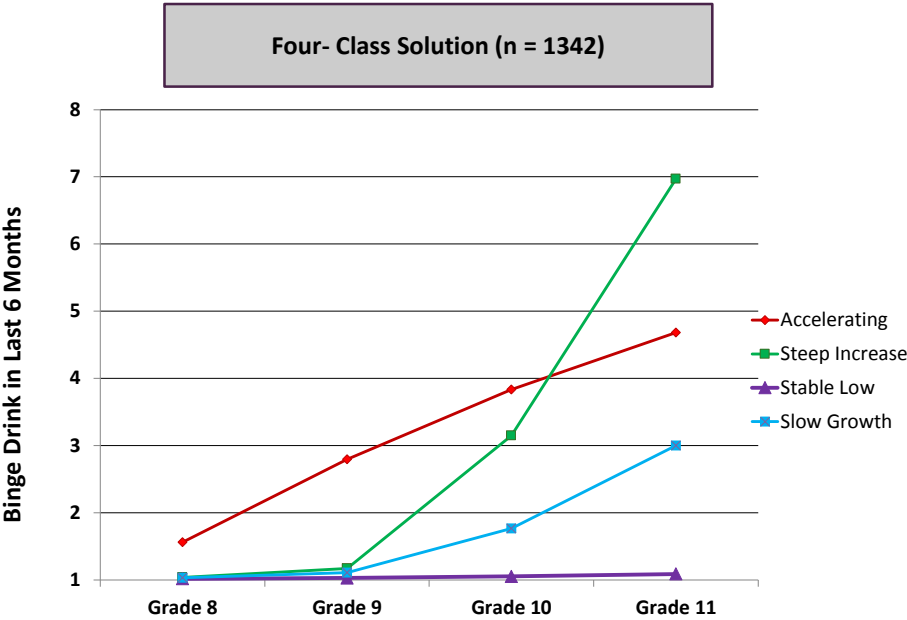
- Rates of alcohol use and binge drinking increase during adolescence, and greater use predicts a range of developmental problems
- Some adolescents are more vulnerable than others to age-related increases in binge drinking
- Early pubertal timing has been linked to early and increased substance use, including binge drinking
(Dick et al., 2000; Westling, et al., 2008; Wichstrom & Wichstrom, 2008)
- The negative effects of early maturation can vary according to social environments, which may either amplify or inhibit risks
(Stattin & Magnusson, 1990)
- Important to identify protective contexts for early-maturing youth

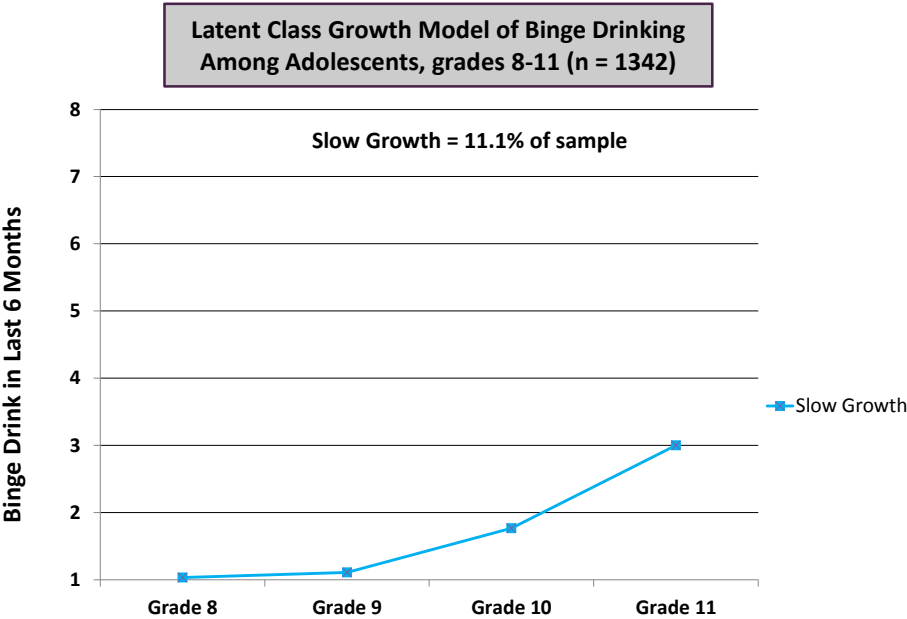
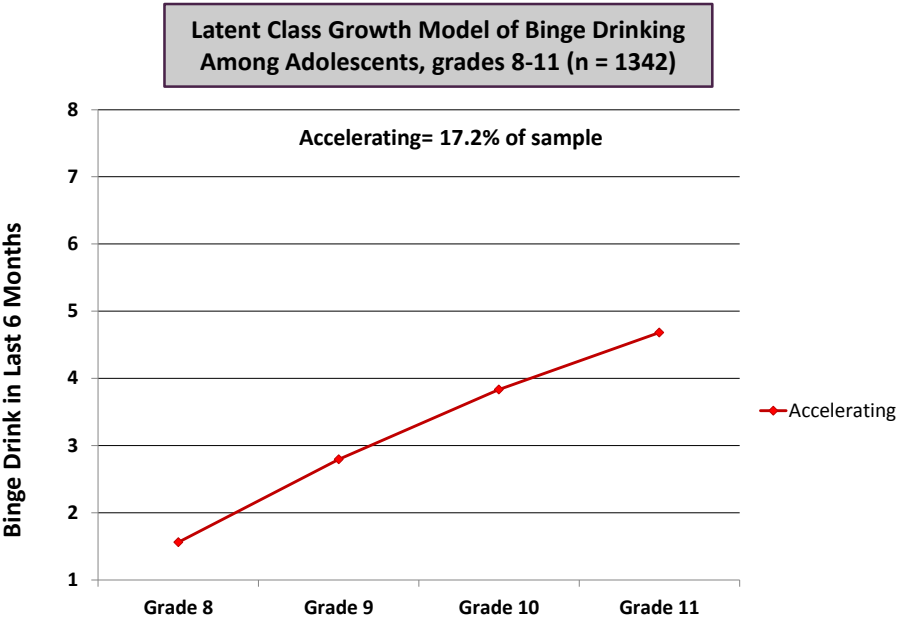


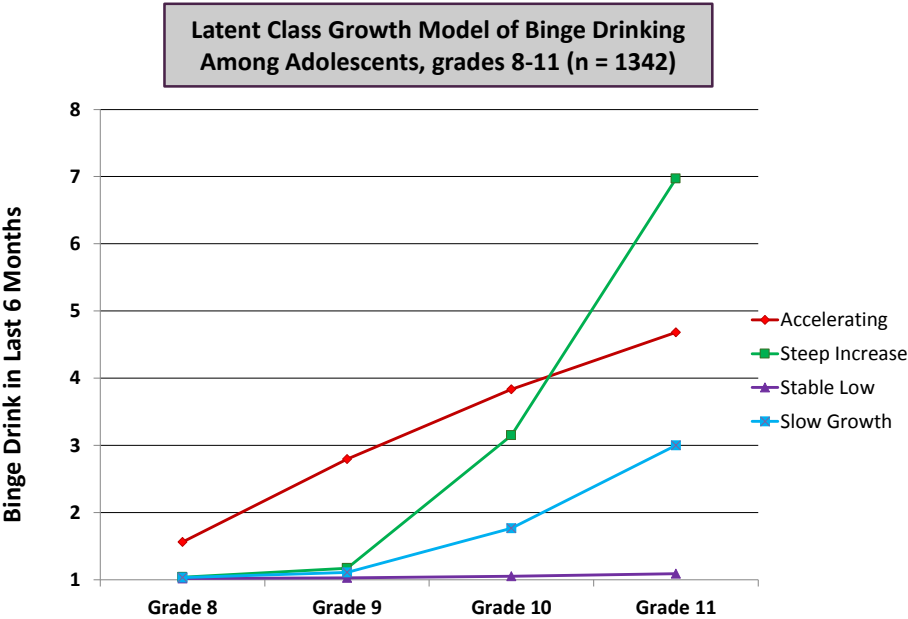
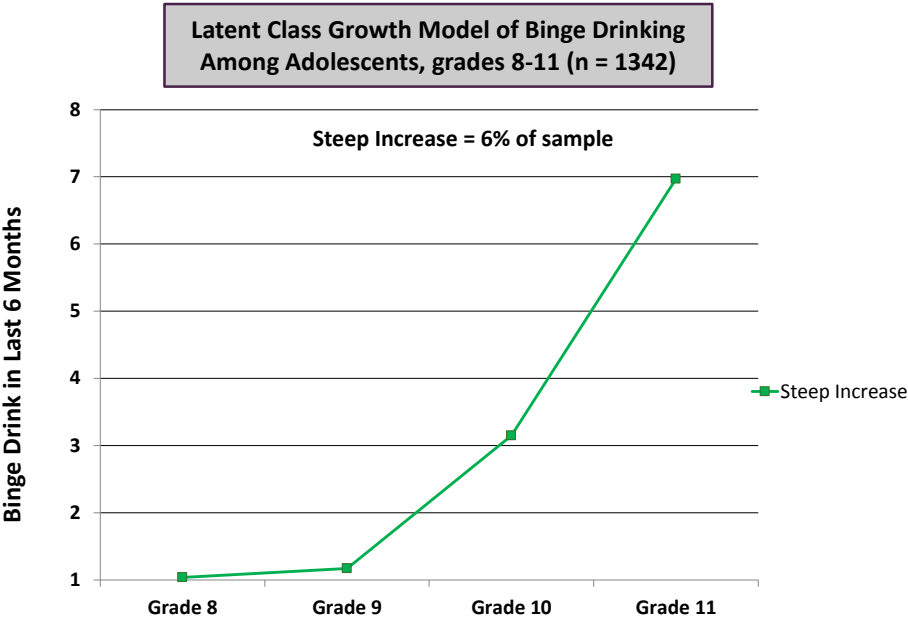
Analytic Strategy

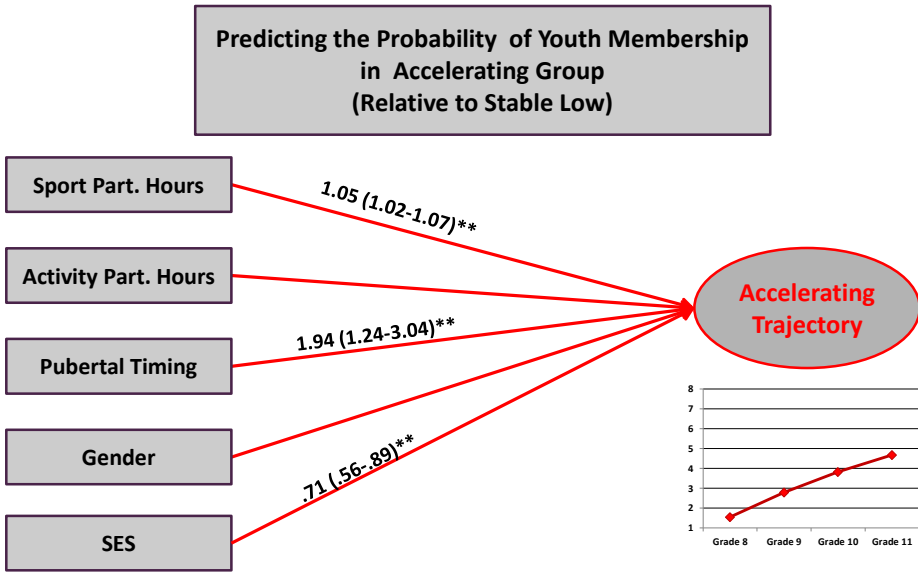
- Latent class growth analysis (LCGA) run in Mplus 6.1 using maximum likelihood estimation and robust standard errors.
 1. Unconditional models without covariates used to classify individuals into groups based on similarities growth trajectories.
 2. Sports hours, activity hours, pubertal timing, gender, and SES as predictors of class membership using multinomial regression within LCGA
 3. Included pubertal timing x activity hours interaction into conditional model.



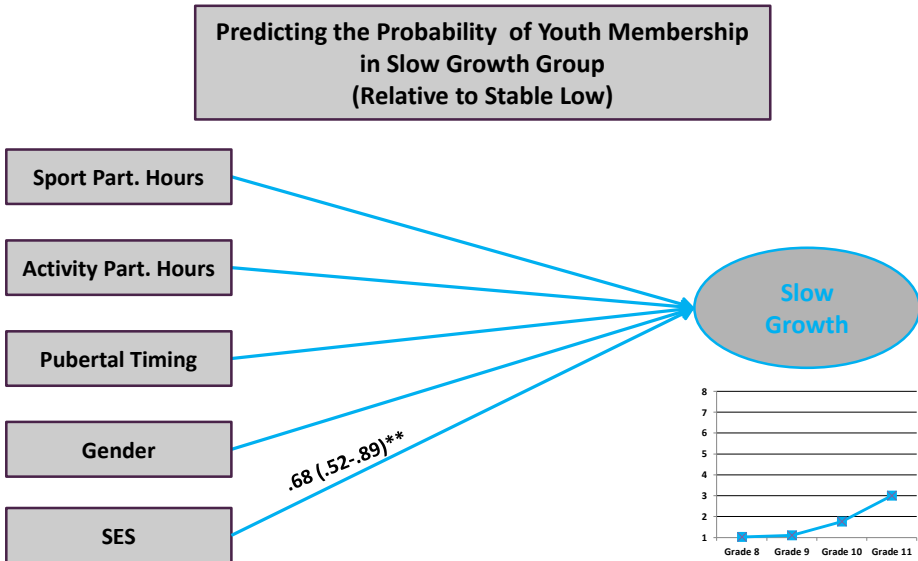




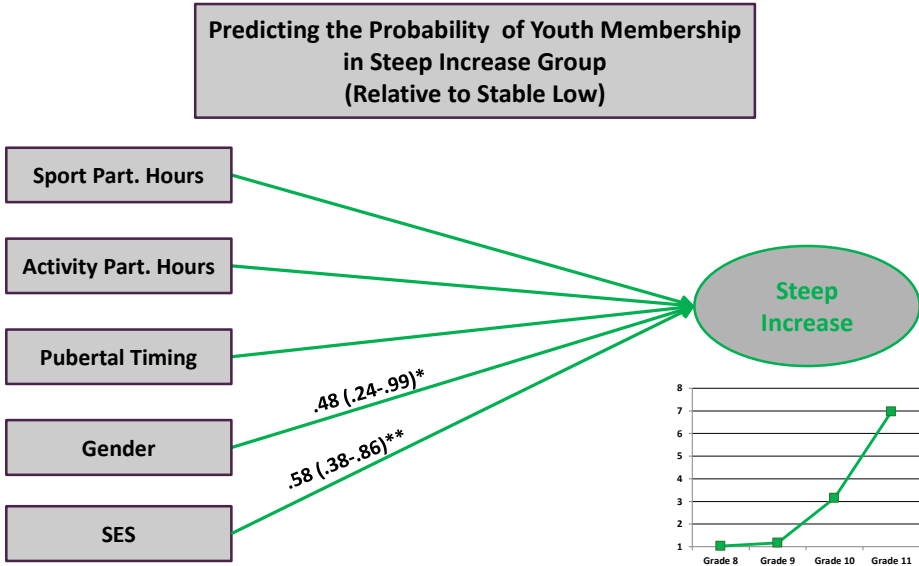




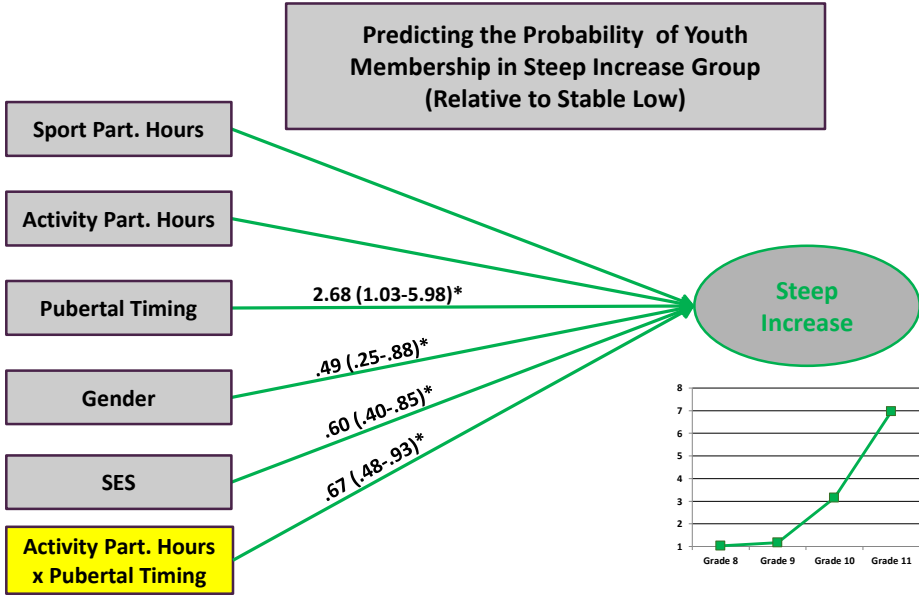
Note: Stable Low serves as the reference group. Odds Ratios and (95% CI) for Multinomial Logistic Regression. Gender 0= female; 1=male; SES 1=low, 2=ave, 3=high; Pubertal timing 0=average-late, 1=early.



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Unpacking the Interaction

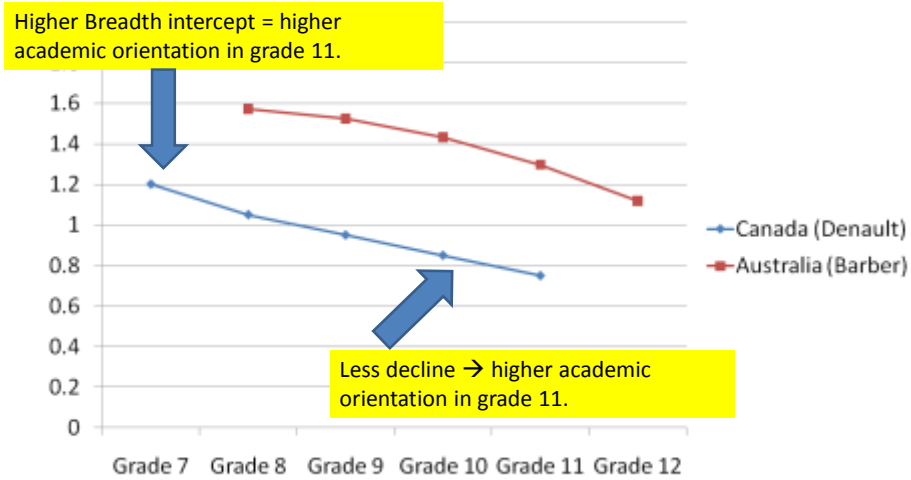
(Jaccard, 2001)

1. For early maturers, every one hour increase in activity decreased the odds of belonging to *Steep Increase* relative to *Stable Low* by .70 (95% CI: .52-.93).
2. For average to late maturers, the relation was non significant between activity hours and *Steep Increase* group membership (OR: 1.03(95% CI: .99-1.07).

Participation over time

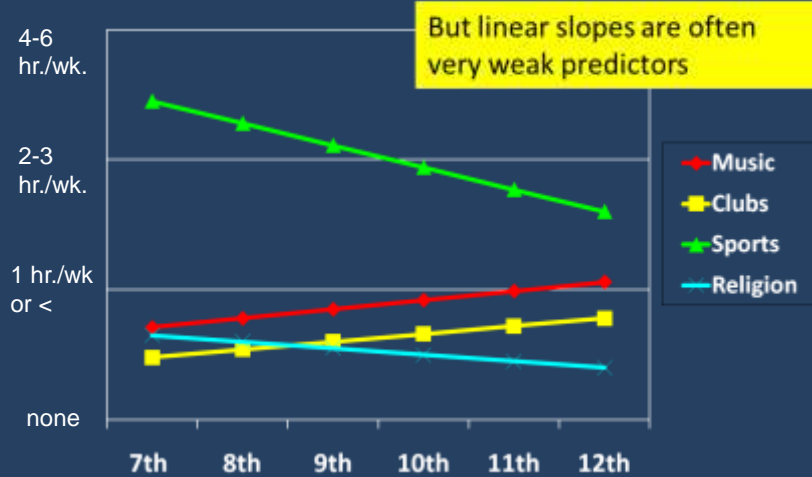
- Most research on activities has examined them at one point in time, and then looked at indicators of well-being (concurrent or long-term)
- **But this fails to consider "WHEN?"**
- Future research must consider what kinds of personal participation histories adolescents choose
- As complexity of the task and alignment to identity increases, specialisation is a likely attraction

Breadth of Participation

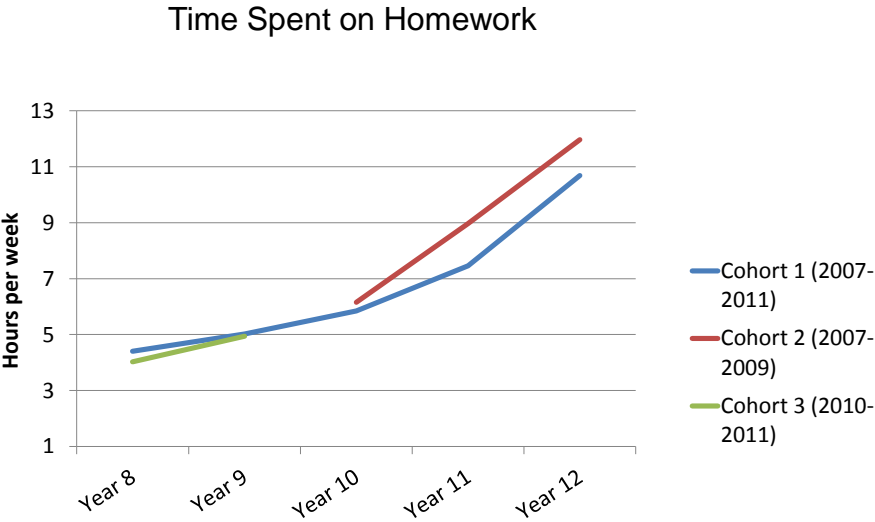
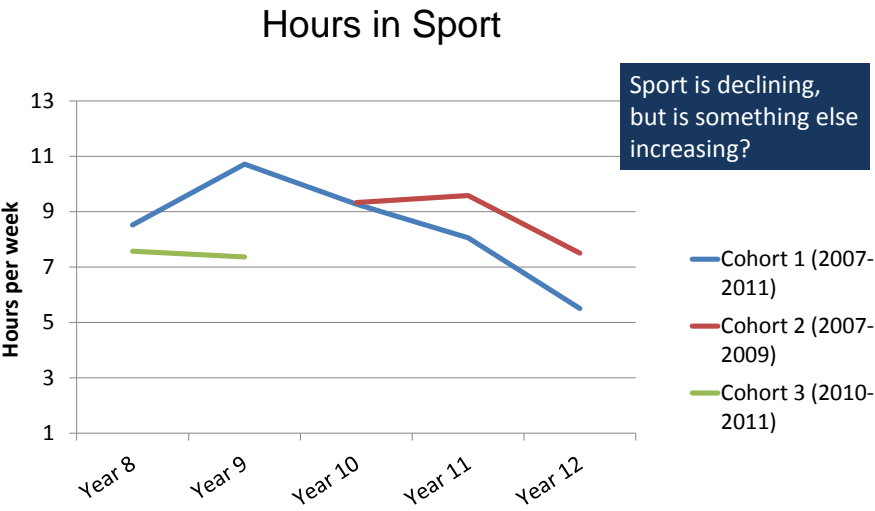


Denault & Poulin, 2009

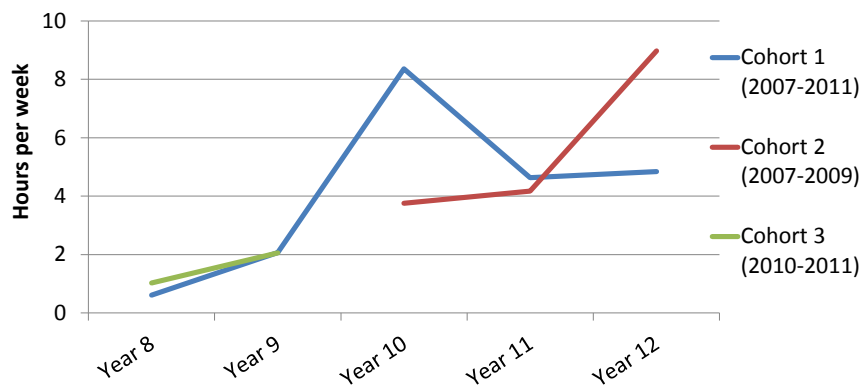
Participation Growth Curves



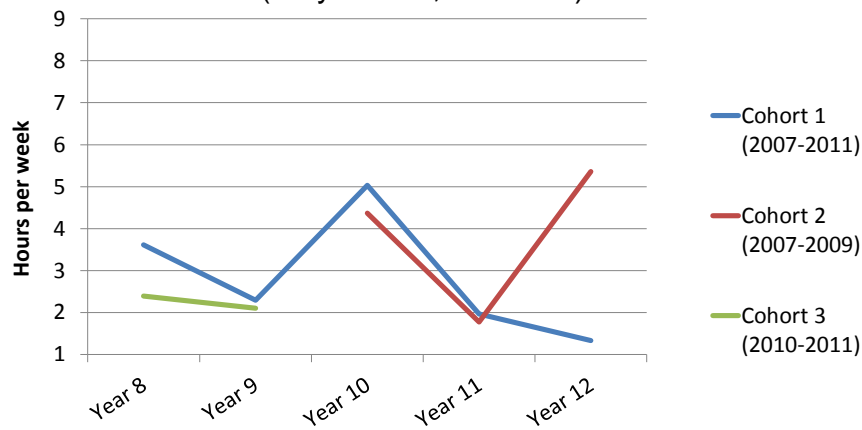
Vest, Simpkins, & Zarrett, 2010



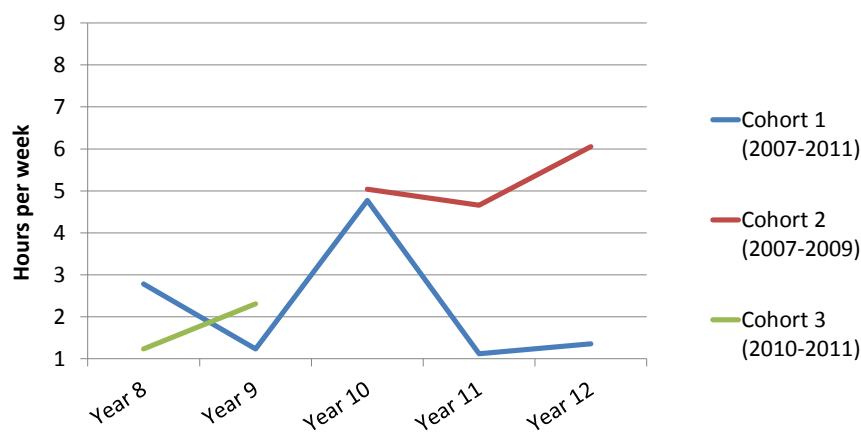
Paid Work



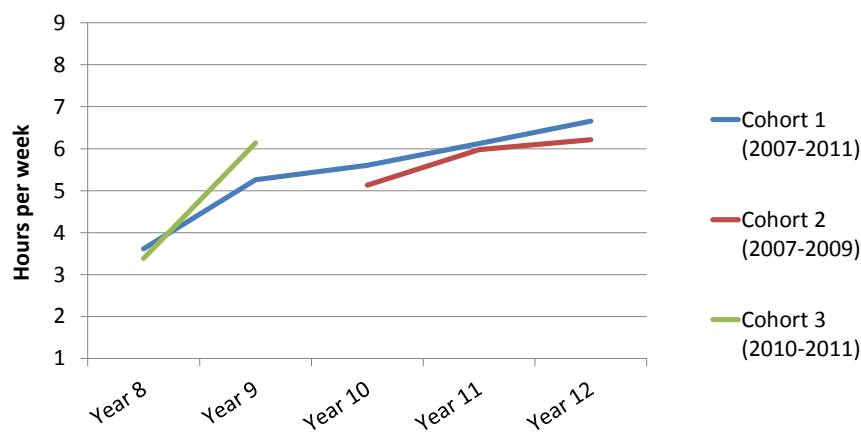
Computer Console Gaming
(PlayStation, Xbox etc)



Internet Gaming (online games)



Social Networking Site Use





Technology quiz

- 1. What percentage of 8-9 year old Australian children have their own mobile phone?
 - A. 4%
 - B. 11%
 - C. 45%

B: A national survey shows that 35% of 10-11 year olds and 67% per cent of 12- 13 year olds have their own mobile phone (Australian Communications and Media Authority, 2013).

Technology quiz

- 2. True or false? Cyber bullying is more common than in-person aggression or bullying among adolescents.
- T F

False. Actually, face-to-face bullying is more common than cyber bullying. About 39% of adolescents report they have been bullied face-to face; and about 20% have been cyber bullied. If you have been bullied on or off line, you should speak to an adult that you trust to try and stop it from happening again. (Minchin, Harbaugh, & Guerra, 2013).

Technology quiz

- 3. What percentage of Australian adolescents report that the internet “always makes them feel good?”
- A. 4%
- B. 16%
- C. 52%

C: The internet is a positive experience for most Australian teenagers. But about ¼ of Australian adolescents (25%) say they saw something on the internet in the last year that bothered them (Australian Communications and Media Authority, 2013).

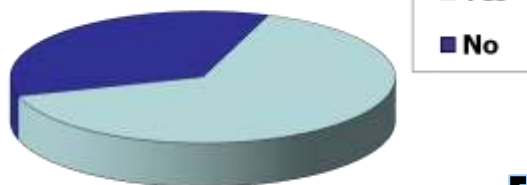
Technology quiz

- 7. True or false? Most Australian teenagers have their social network profiles set to private.
- T F

True. Most Australian teenagers have their profile set to private (66%) or else partially private (25%) (Australian Communications and Media Authority, 2013). Like other teenagers, you should make sure that your profile is set to private.

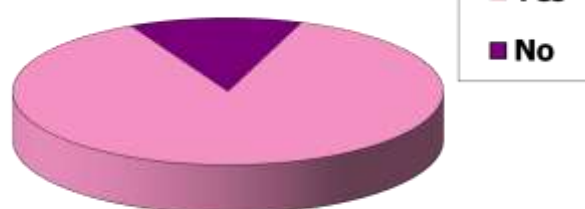
Have You Ever Created Your Own Profile Online?

Males

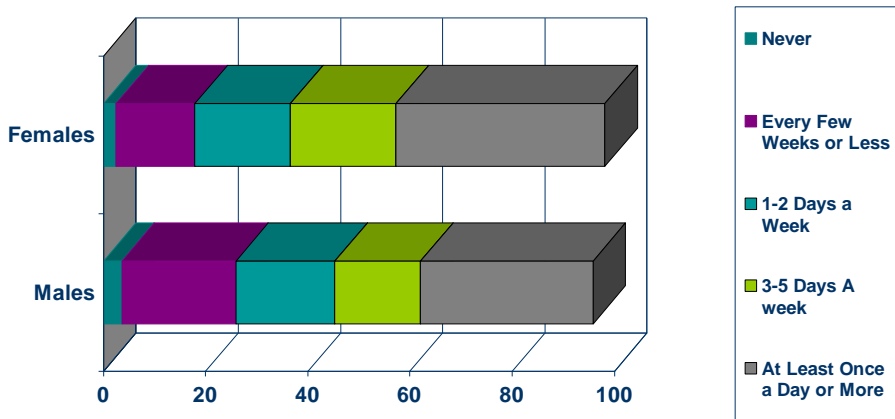


2010

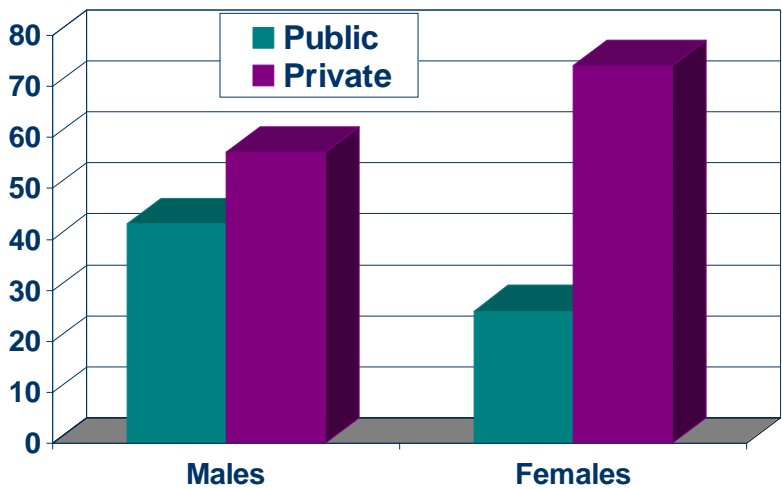
Females



How Often Do You Visit Your Profile?

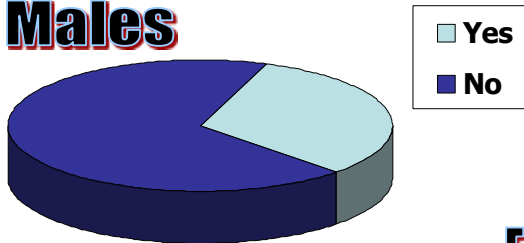


Is Your Profile Set to Public Or Private?

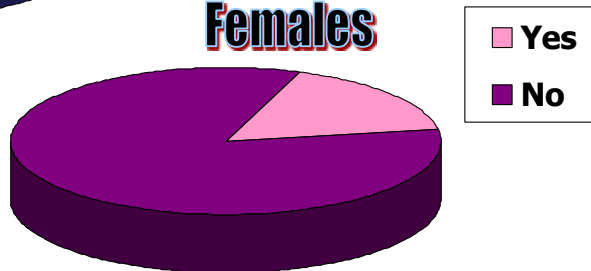


Is Any Of The Info On Your Profile Not True?

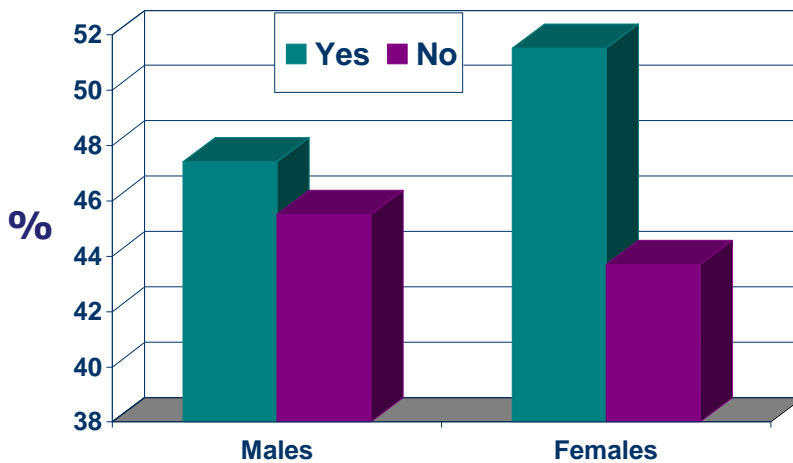
Males



Females



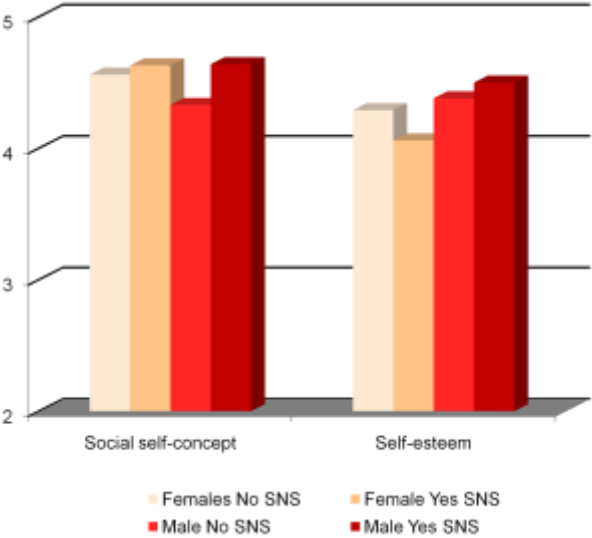
Have You Ever Deleted A Friend?



In 2009 the term 'unfriend' was named by New Oxford American Dictionary as word of the year.

Youth SNS use and Well-being

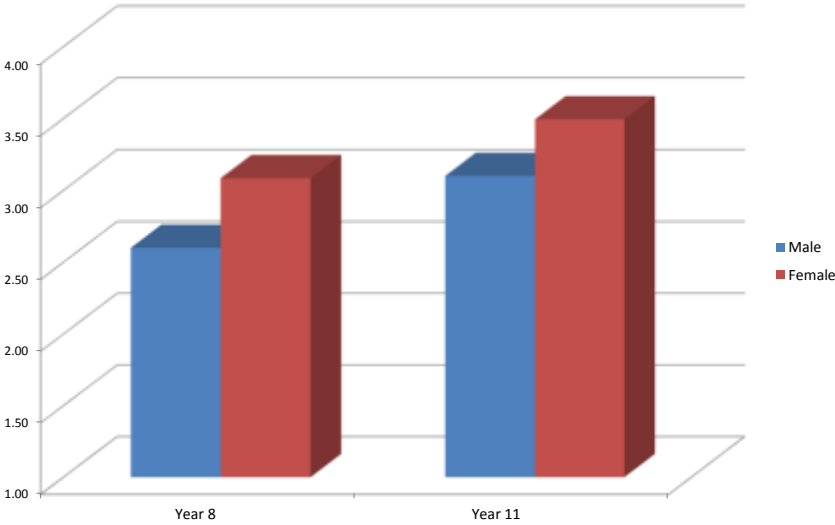
Social Self-Concept & Self-esteem by SNS profile and gender.



Having a profile on a social networking site (SNS) was found to be associated with higher social self-concept for male adolescents, but not for female adolescents. In fact for female adolescents, those with a SNS profile had lower self-esteem than those without a profile.

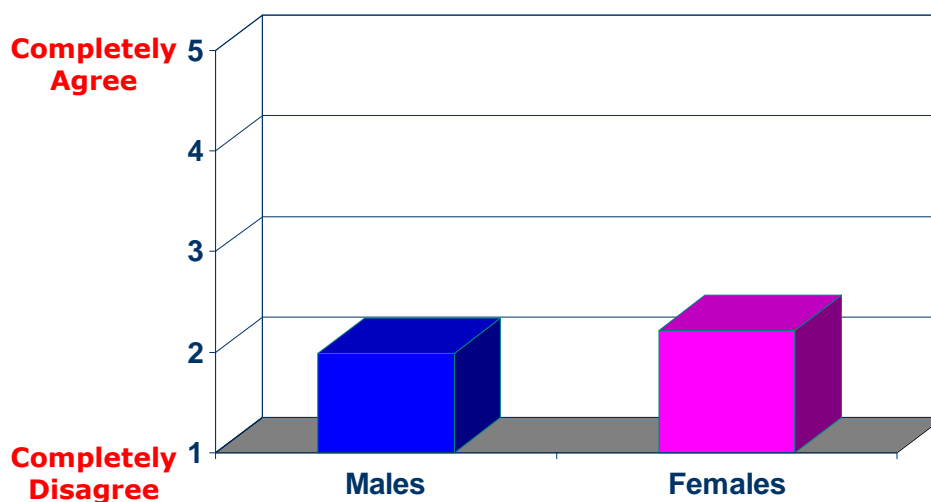
"It helps me make more friends and I feel a lot less shy when talking to new people"

Facebook has become part of my daily routine



1 = Completely Disagree; 5= Completely Agree

HOW TRUE:
**"I Feel Out of Touch When I Haven't
 Logged on to My Profile"**



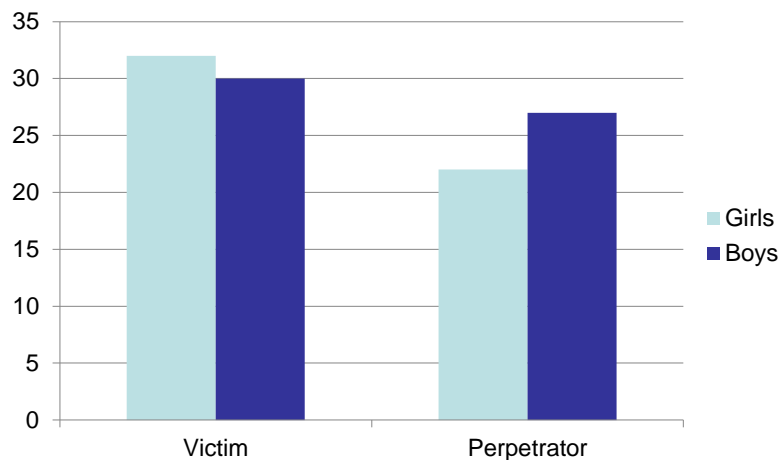
Youth SNS use and Well-being

For adolescents with a SNS profile, the frequency with which they used their profile was a positive predictor of their social self-concept. However, the degree to which adolescents were invested in their SNS profiles was found to be a negative predictor of their self-esteem.



Cyber-aggression in WA

% who have in last 6 months



Victim: Has a student or group of students told lies or made fun of you using the internet (email, instant messaging, text messaging, or websites)?
Perpetrator: Have you told lies or made fun of some students using the internet (email, instant messaging, text messaging, or websites)?

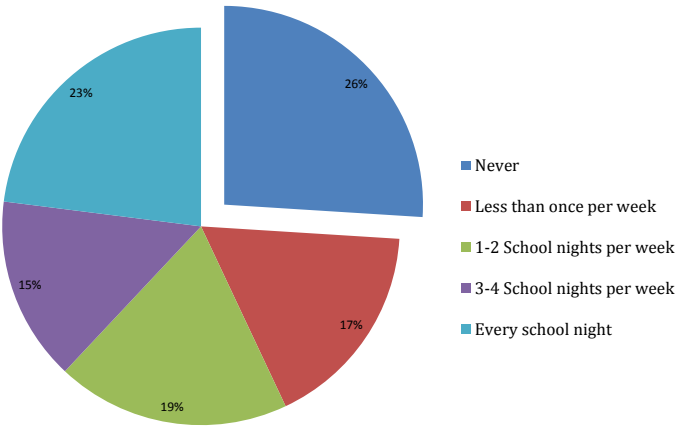
Sleep: How Much Are Students Using Technology after Lights Out?

- Concerns about media use by adolescents has extended from just having a television in the bedroom, to accessing computers with the Internet, to engaging in texting/phoning well into the night.



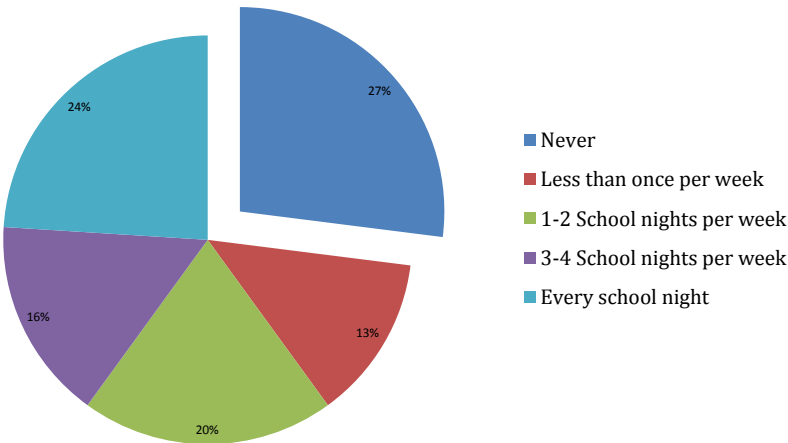
91% of YAPS students own a mobile phone.

YAPS Participants Texting/Phoning after Lights Out

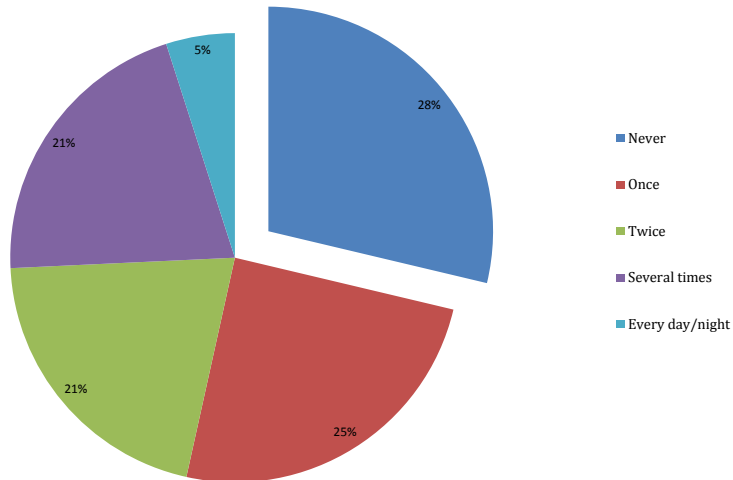


73% of YAPS students have access to the Internet in their bedroom.

YAPS Participants Accessing the Internet after Lights Out



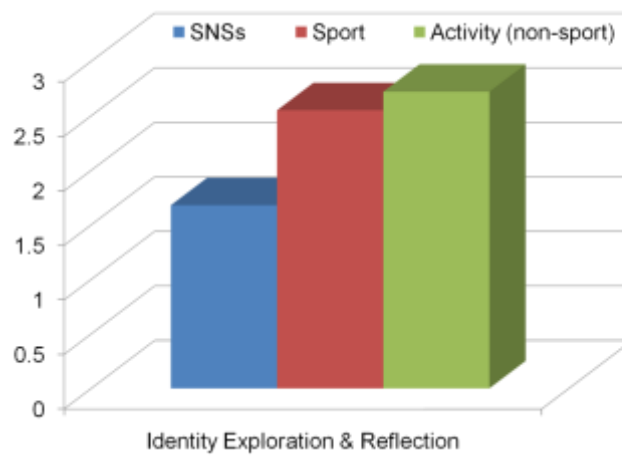
YAPS Participants: Too Tired to Complete Homework.



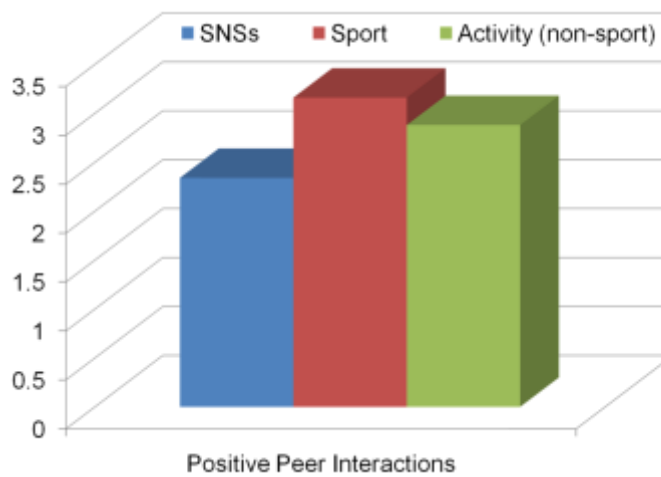
Benefits of Unstructured leisure?

- Social networking might also meet some adolescent developmental needs
 - Social relatedness
 - Identity

Experiences of identity exploration & reflection across leisure contexts



Experiences of positive peer interactions across leisure contexts



Stop and discuss

What has become the biggest issue/challenge in your school related to increasing use of technology?

How much of a problem do you find cyber-aggression and sexting to be in your school?

What kind of research evidence do we need to help you in your job?

How do you think technology could be used to aid mental health in schools?



- I want to acknowledge the adults who manifest a strong commitment to improving the opportunities for youth to participate in meaningful activities, as coaches and mentors, and the youth who have responded with such enthusiasm
- The Youth Activity Participation Study – Western Australia has been funded by two grants from The Australian Research Council to Bonnie Barber and Jacquelynne Eccles. We are grateful to the 33 High School principals, their staff, and the students who participated in the study.



Questions?

